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REMARKS

Applicants have carefully studied the outstanding Office Action. This paper is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims are respectfully requested.

Status of Claims

Claims 2, 4-6, 26, 27, 36-38, 40, 41, 54-56, and 58-63 are pending in this application. Claims 1, 7-25, 28-35, 39, and 42-53 have been previously canceled, without prejudice. Applicants propose to cancel without prejudice claims 3, 54, 55, 57 and 63. Applicants respectfully request favorable reconsideration and entry of this proposed cancellation.

Applicants respectfully assert that no new matter has been added.

CLAIM OBJECTIONS

Claim 3 has been objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

As claim 3 has been cancelled without prejudice, this objection is now moot.

CLAIM REJECTIONS

Claim Rejections under 35 USC §112

Claims 54, 55 and 63 were rejected under 35 USC §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner contended that

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claims 54, 55 and 63 contained subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention.

As claims 54, 55 and 63 have been cancelled without prejudice, these rejections are now moot.

Claim Rejections under 35 USC §102

Claims 2-5, 26, 27, 36-38, 40, 41, 56-59, 61 and 62 were rejected under 35 USC §102(b) as being anticipated by Liron (US Patent Number 4428044).

Applicants respectfully traverse the rejection of claims 2-5, 26, 27, 36-38, 40, 41, 56-59, 61 and 62 under 35 U.S.C. § 102(b), inter alia, because a prima facie case of anticipation has not been established, as discussed below.

As is well established, in order to successfully assert a prima facie case of anticipation, the Examiner must provide a single prior art document that teaches every element and limitation of the claim or claims being rejected.

Independent claims 2 and 56 each recite at least one FIFO unit to transfer data between separate busses of separate processing units. Applicants respectfully assert that at least this feature is not anticipated by Liron. As discussed in detail below, Liron describes two FIFO units to receive, in synchronization, peripheral orders from a common peripheral bus, and to provide the peripheral orders to two microprocessors, respectively. Liron does not teach or fairly suggest at least transferring data between separate busses of separate microprocessors, as recited by claims 2 and 56.

Liron describes a device including a pair of microprocessors 200 and 204 whose outputs are matched. Microprocessors 200 and 204 are both associated with a common peripheral bus

208 (Abstract and Fig. 1). As noted by the Examiner, the device described by Liron includes RAMs 203 and 207 associated with microprocessors 200 and 204 via busses 214 and 215, respectively; a DMA 212 and a FIFO 201 associated with bus 214; and a DMA 213 and a FIFO 205 associated with bus 215 (Fig. 1). However, Applicants respectfully disagree with the Examiner's contention that FIFO 201 and FIFO 205 are adapted for transferring data between the two separate busses 214 and 215. On the contrary, as further described by Liron, FIFO 201 and FIFO 205 are adapted to receive, in synchronization, peripheral orders from peripheral bus 208, and to provide the peripheral orders to microprocessors 200 and 204, respectively. The device includes a bus 220 for synchronizing between FIFO 201 and 205 (Col. 13, lines 2-16). DMA 212 and DMA 213 are used for copying information from RAM 203 to RAM 207, via a bus 217 (Col. 5, line 54 – Col. 6, line 14). Thus, Applicants respectfully assert that neither one of FIFO 201 and FIFO 205 transfers data between busses 214 and 215.

Therefore, it is respectfully requested that the rejection of independent claims 2 and 56 under 35 USC §102(b) be withdrawn.

Independent claim 36 recites "establishing a first DMA channel to a FIFO unit from a first memory directly accessible only by the first processing unit, and a second DMA channel from the FIFO unit to a second memory directly accessible only by the second processing unit". Applicants respectfully assert that this feature is not anticipated by Liron. Specifically, as discussed above, Liron describes using first and second FIFO units for synchronizing between two microprocessors by receiving, in synchronization, peripheral orders from a common peripheral bus, and providing the peripheral orders to two microprocessors, respectively. Liron does not teach or fairly suggest at least establishing a first DMA channel from a first memory to a FIFO unit and a second DMA channel from the FIFO unit to a second memory, for transferring data between the first and second memories, as recited by claim 36.

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Therefore, it is respectfully requested that the rejection of independent claim 36 under 35 USC §102(b) be withdrawn.

Furthermore, it is respectfully asserted that the distinguishing features of independent claims 2, 36 and 56, as discussed above, would not have been obvious at the time the invention was made to a person skilled in the art, in view of Liron, alone or in combination with any other cited references, including the Gruner et al. reference discussed below in connection with claims 6 and 60. Therefore, it is respectfully asserted that independent claims 2, 36, and 56 are patentable, and thus allowable, over the prior art references on record.

Claims 4, 5, 26, and 27 are each directly dependent from independent claim 2 and incorporate all the elements of this claim.

Claims 37, 38, 40, and 41 are each directly dependent from independent claim 36 and incorporate all the elements of this claim.

Claims 58, 59, 61 and 62 are each directly dependent from independent claim 56 and incorporate all the elements of this claim.

Therefore, it is respectfully submitted that claims 4, 5, 26, 27, 37, 38, 40, 41, 58, 59, 61 and 62 are patentable at least for the reasons set forth above.

As claims 3 and 57 have been cancelled without prejudice, these rejections are now moot.

Claim Rejections under 35 USC §103

Claims 6 and 60 were rejected under 35 USC §103(a) as being unpatentable over Liron, and further in view of Gruner et al. (US Patent Application No. 2003/0009629). Specifically, the Examiner contended that Liron discloses the claimed subject matter, except that Liron does not disclose an apparatus where one of the processing units is to process MAC commands and

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another of the processing units is to process PHY commands of a networking protocol. The Examiner contended that, in view of Gruner, these differences would have been obvious to one of ordinary skilled in the art.

Claim 6 is directly dependent from independent claim 2 and incorporates all the elements of this claim. Claim 60 is directly dependent from independent claim 56 and incorporates all the elements of this claim. Therefore, it is respectfully submitted that claims 56 and 60 are patentable at least for the reasons set forth above.

CONCLUSION

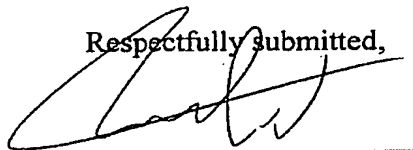
The present communication is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested. It is submitted that the application is now in condition for allowance. Prompt notice of allowance is respectfully requested.

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Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Please charge any fees associated with this paper to deposit account No. 05-0649.

Respectfully submitted,



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